

Work Order ID 77759

77759

Page 1

December 21-11-8:24:42 AM

Item ID: D350-636-011

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Skidtube LH

Start Date: 21/12/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 09/01/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan: MLJ

Date: 11/12/21

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2750	F								
D3492	C								

100

100

DC

Document Control

DOCUMENT CONTROL

Memo

Photocopy blue file and type labels per PPP D350-636-011 CHG 006

0.00

0.00

S 12/02/06

MLJ 12-2-3

B 77759

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

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Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110	Skidtubes	0.00							
110									
Skidtubes	Memo	0.00							
Skidtubes	1- Pick D2600-3 Bent								
	2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside AFT end per dwg D2750								
	3- Drill pilot holes for blade fitting bolt holes using DT8983. Open to 0.500", deburr.								
	4- Locate DT8330 off of blade fitting bolt holes and drill pilot holes for blade fitting								
	5- Drill only two fwd step holes using DT9616. Ensure proper positioning.								
	6- Drill pilot holes as per Dwg D2750 sheet 4 (D2750-1 details). Drill using drill Jig DT8150 & DT8863A for first side only DT8863B for second side (detail B)								
	7- Clecko DT8863B on second side of tube and drill pilot holes for detail B. ***SECOND SIDE***								
	8-Open up holes for Detail B to 0.375" (4 holes per side) and blade fitting location holes to 0.500" (total of 4 holes per side) as per dwg D2750. Open up holes for ground handling and detail C to 0.500" (8 holes per side)								
	9-Drill pilot holes for wearplates as per Dwg D2750 using DT8108 open to 0.297".								
	10-Open up holes of Detail A to 0.297" (total of 2 holes per side)								

JW 12-1-9

BB 12/01/14

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Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
	11-Weld D2744 Cap as per Dwg D2750 and QSI 004. Fill grooves in bend left from bending as per QSI 004 A/R Aluminum Rod batch: <i>M119712</i>			<i>86</i>					<i>12-01-16</i>
	12-Grind welds flush as per Dwg D2750			<i>SAD</i>					<i>12-01-19</i>
120 *120* QC Quality Control	QC10- Inspect visual per QSI004- ground welds Memo	0.00 0.00		<i>S 12/01/19</i>					
130 *130* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00		<i>S 12/01/19</i>					<i>(40)</i>

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Customer:

Reference:

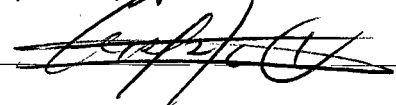
Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	Chemical Conversion Coat per QSI005 4.1	0.00							
140									
HandFinish	Memo	0.00		MO			12/1/19		
Hand Finishing									
150	QC3- Inspect Part Finish	0.00							
150									
QC	Memo	0.00							
Quality Control									

BE 12/01/19


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 Required Date: 09/01/2012 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Skidtubes	0.00							
160									
Skidtubes	Memo	0.00							
Skidtubes	1-Open up holes of Detail C and ground handling to 0.625" (total of 8 holes per side) as per dwg D2750.								
	2-Open up holes of Detail B to 0.750" (total of 4 holes per side) as per dwg D2750.								
	3- Open float hole to 0.500" (4 per side)								
	4-Chamfer holes of Detail B, C, ground handling and float holes per dwg D2750 (welding instructions on sheet 8)								
	5-Deburr and blow out all chips from inside of tube								
	6- Prepare tube for welding, remove alodine as required.								
	7-Bond web D2739 in place as per QSI 015 A/R Sikaflex-291 batch: <u>119508</u> exp. date: <u>12/08/13</u> <i>OK 12/01/20</i>								
	8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D2750 & QSI004 (welding instructions on sheet 8) A/R Aluminum Rod batch: <u>M119712</u> <i>BB 12-01-24</i>								
	9- At section AJ-AJ drill out x-bolt spacer to 0.404"								
	10-Grind welds flush as per Dwg D2750 <i>BB 12/01/28</i>								

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 Required Date: 09/01/2012 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
	11-Spot face ground handling holes section (total of 4 places per side) as per dwg D2750								
	12-Deburr holes								
170	QC10- Inspect visual per QSI004- ground welds	0.00							
170		0.00							
QC	Memo								
Quality Control									
180	QC5- Inspect part completeness to step on W/O	0.00							
180		0.00							
QC	Memo								
Quality Control									

12/01/20

12/01/30

12/01/30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	Pressure Wash per QSI005 4.3	0.00							
190									
HandFinish	Memo	0.00							
Hand Finishing	Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.								
200	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
200									
Powdercoat	Memo	0.00							
Powder Coating	START TIME: 8-30 OVEN TEMPERATURE: 320°F FINISH TIME: 9-00								
210	QC3- Inspect Part Finish	0.00							
210									
QC	Memo	0.00							
Quality Control	Inspect for foreign object per QSI 024								

1 BK 12-1-31

1 Xp m-12/02/01

1 f M 12/02/01

M119480

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220		0.00							
220	HandFinishing								
HandFinish	Memo	0.00							
Hand Finishing	1- Install inserts as per Dwg D2750								1 1/4 6 11 12/02/01
230		0.00							
230	HandFinishing								
HandFinish	Memo	0.00							
Hand Finishing	1-Inspect for Foreign Objects								
	2-Spray inside of tube with "LPS-3" batch: N/A								
	3-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D2750								
	SIKA FLEX 241								
	BATCH: 11118508								
	EXP DATE: 12/02								
	4-assemble o'ring to plug as per dwg D3492 and apply o'ring lube								
	A/R 55-o'ring lube batch: 1110348								
	5-Coat all exposed fasteners with "LPS Procyon" batch: 11114596								

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
240 *240* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00	S 12/21/12						
250 *250* Packaging Packaging	Pick Kit Memo	0.00 0.00							
260 *260* QC Quality Control	QC4- 100% Inspect kits for completeness Memo *****ensure antiseize is on AN8C21A bolts*****	0.00 0.00	S 12/21/06						

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

270

0.00

270

Packaging

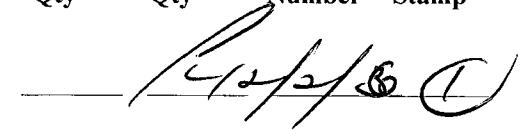
Packaging

Memo

0.00

Packaging

Package as per PPP D350-636-011



280

0.00

280

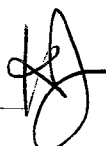
QC21- Final Inspection - Work Order Release

QC

Memo

0.00

Quality Control

M.C.J 12/02/11 
mf
12-02-11

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Picklist Print

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Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 21/12/2011

Required Date: 09/01/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:I 02.09.25 Rearranged procedure steps KJ
IPP Rev:J 06-03-23 As per Rev D JLM
IPP Rev:K 06-07.13 As per dsi9343 EC
IPP Rev:L 07-07-28 Added SS Wearplates(Rev E) JLM Verf:EC
IPP Rev:M 08-04-22 update steps 4, 13 DD verified by:EC
IPP Rev:N 08-09-23 revF as per dwg DD verified by:ec
IPP Rev:O 09-02-06 apply antiseize on AN8C21A bolts as per PAR09-010
DD verf:EC IPP Rev:P 10.06.22 revise
seq110 DD verf:EC IPP Rev:Q 10.10.01 as per IIN revH
DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3492-1		Manufactured	No			230	Each	110.0000	8	8			
D3492-1									**				
Plug													

Location	Loc Qty	Loc Code
FP002	110	
69531	8	
74444	2	
76235	100	

D3492-3		Manufactured	No			230	Each	61.0000	8	8			
D3492-3									**				
Plug													

Location	Loc Qty	Loc Code
FP002	61	
74447	17	
74871	44	

1377039 (x8) M 12/02/11

W/O:		WORK ORDER CHANGES					
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D350-636-011

Parent Item Name: Skidtube LH

Start Date: 21/12/2011

Required Date: 09/01/2012

Start Qty: 1.00

Required Qty: 1.00

NAS1611-010

Purchased

No

230

Each

135.0000

8

8

NAS1611-010

O-RING

**

11/20/11 (xg) 11/21/11

Location

Loc Qty

Loc Code

FP001

135

110915

14

117460

8

118077

1

118612

3

119438

59

119623

50

NAS1149D0863J

Purchased

No

250

Each

173.0000

2

2

NAS1149D0863.J

WASHER

**

[Signature]

Location

Loc Qty

Loc Code

ST298

173

118078

73

119307

100

118078

D2744

Manufactured

No

110

Each

34.0000

1

1

D2744

Cap

**

DE 12-01-16

Location

Loc Qty

Loc Code

LG002

34

62715

1

70881

12

71861

21

1

W/O:		WORK ORDER CHANGES					
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Parent Item Name: Skidtube LH

Start Date: 21/12/2011

Required Date: 09/01/2012

Start Qty: 1.00

Required Qty: 1.00

D2600-3-BENT

Manufactured No

110

Each

26.0000

1

1

D2600-3-BENT

Extrusion Bent

**

Location

Loc Qty

Loc Code

LG

26

66875

7

73253

1

75021

1

75022

1

75023

1

77623

15

D2743

Manufactured No

160

Each

169.0000

8

8

D2743

Crossbolt Spacer

**

Location

Loc Qty

Loc Code

LG001

169

67766

4

68251

3

73403

64

74445

92

76141

6

D2739

Manufactured No

160

Each

4.0000

1

1

D2739

350 I Beam

**

Location

Loc Qty

Loc Code

LG

4

72155

1

76987

3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 4

Work Order ID: 77759

77759

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 21/12/2011

Required Date: 09/01/2012

Start Qty: 1.00

Required Qty: 1.00

D3490-3 Manufactured No

160 Each 22.0000 4 4

D3490-3

Cross Bolt Spacer

**

Location Loc Qty Loc Code

LG001 22

74877 22

D3490-1 Manufactured No

160 Each 30.0000 4 4

D3490-1

Cross Bolt Spacer

**

Location Loc Qty Loc Code

LG001 30

62450 2

67773 4

74875 24

ALS4-1032-225 Purchased No

220 Each 1,348.000 38 38

ALS4-1032-225

Insert

**

Location Loc Qty Loc Code

ST281 1348

108696 199

110768 62

118386 858

118966 229

D3793-3 Manufactured No

230 Each 18.0000 1 1

D3793-3

Wearshoe

**

Location Loc Qty Loc Code

FP001 18

74528 5

74593 1

75043 12

BE12-01-24
B77567 x4

BE12-01-24
B77042 x4

12/02/01

x8

x30

12/02/01

x1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 5

Work Order ID: 77759

77759

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 21/12/2011

Required Date: 09/01/2012

Start Qty: 1.00

Required Qty: 1.00

AN8C35A

Purchased

No

230

Each

87.0000

1

1

AN8C35A

BOLT

**

12/02/01

Location

Loc Qty

Loc Code

FP002

86

115960

1

117834

29

118286

56

1

ST346

1

114442

0

115188

0

115960

1

D3793-1

Manufactured

No

230

Each

14.0000

1

1

D3793-1

Wearshoe

**

12/02/01

Location

Loc Qty

Loc Code

FP001

14

74591

2

75038

12

D3488-041

Manufactured

No

230

Each

17.0000

1

1

D3488-041

Blade Fitting Assembly, LH

**

12/02/01

Location

Loc Qty

Loc Code

FP002

17

61689

1

67788

1

69903

4

71887

2

75056

9

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 6

Work Order ID: 77759

77759

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 21/12/2011

Required Date: 09/01/2012

Start Qty: 1.00

Required Qty: 1.00

D3794-3

Manufactured No

230 Each

17.0000 1 1

D3794-3

Gasket

**

B78895 (x1) 12/02/07

Location

Loc Qty

Loc Code

FP002

17

74530

3

74596

14

AN6C44A

Purchased No

230 Each

59.0000 4 4

AN6C44A

BOLT

**

12/04/05 (x4) 12/02/07

Location

Loc Qty

Loc Code

FG

2

103964

2

ST343

57

118985

27

119125

30

MS21083C8

Purchased No

230 Each

60.0000 1 1

MS21083C8

NUT

**

12/02/07

Location

Loc Qty

Loc Code

FP002

1

115884

1

ST303

59

115884

0

118077

1

118614

17

119309

2

119436

25

119638

14

x1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 7

Work Order ID: 77759

77759

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 21/12/2011

Required Date: 09/01/2012

Start Qty: 1.00

Required Qty: 1.00

D3536-25

Manufactured No

230

Each

23.0000

1

1

D3536-25

Gasket

**

12/02/01

Location

Loc Qty

Loc Code

FP002

23

75039

23

X1

D3631-1

Manufactured No

230

Each

399.0000

8

8

D3631-1

Washer

**

12/02/01

Location

Loc Qty

Loc Code

ST072

399

68062

2

75548

397

X8

D3791-1

Manufactured No

230

Each

25.0000

1

1

D3791-1

Wearplate

**

12/02/01

Location

Loc Qty

Loc Code

FP002

25

62239

2

74598

7

75041

16

X1

AN960C10L

NAS1149C0332

Purchased

No

230

Each

0.0000

38

38

***AN960C10I ***

washer

**

11119739 (x38) 12/02/01

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 8

Work Order ID: 77759

77759

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 21/12/2011

Required Date: 09/01/2012

Start Qty: 1.00

Required Qty: 1.00

D2745

Manufactured No

230

Each

137.0000

8

8

D2745

Bushing

**

u

12/02/01

Location

Loc Qty

Loc Code

FP001

137

B78593

x1

69529

1

74446

36

76142

100

x7

AN3C5A

Purchased

No

230

Each

1,046.000

34

34

AN3C5A

Bolt

**

u

12/02/07

Location

Loc Qty

Loc Code

FP001

7

115835

7

ST350

1039

116419

28

117343

17

117764

49

117872

2

119127

500

119749

443

x34

D3537-1

Manufactured

No

230

Each

56.0000

3

3

D3537-1

Wearpad

**

B77560 (x3) u 12/02/01

Location

Loc Qty

Loc Code

FP002

56

69817

5

74867

51

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 77759

77759

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 21/12/2011

Required Date: 09/01/2012

Start Qty: 1.00

Required Qty: 1.00

NAS1149C0832R

Purchased

No

230

Each

326.0000

1

1

NAS1149C0832R

WASHER

**

12/02/01

Location

Loc Qty

Loc Code

ST297

326

114915

326

✓

AN3C6A

Purchased

No

230

Each

250.0000

4

4

AN3C6A

BOLT

**

12/02/01

Location

Loc Qty

Loc Code

FP001

1

111982

1

ST351

249

111982

2

116419

23

116549

2

116704

12

117619

10

117688

1

117872

5

118422

13

119449

100

119749

81

✓

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 10

Work Order ID: 77759

Parent Item: D350-636-011

Parent Item Name: Skidtube LH

77759

D350-636-011

Start Date: 21/12/2011

Required Date: 09/01/2012

Start Qty: 1.00

Required Qty: 1.00

NAS1611-013

Purchased

No

230

Each

128.0000

8

8

NAS1611-013

O-RING

**

7/1/2012 (cre) M 12/02/01

Location

Loc Qty

Loc Code

FP001

128

116582

5

117291

2

117887

53

119307

24

119438

2

119623

42

D3535-25

Manufactured

No

230

Each

21.0000

1

1

D3535-25

Wearshoe

**

M 12/02/01

Location

Loc Qty

Loc Code

FP001

21

62233

1

74592

8

75040

12

D3794-1

Manufactured

No

230

Each

35.0000

1

1

D3794-1

Gasket

**

M 12/02/02

Location

Loc Qty

Loc Code

FP002

35

74594

7

75042

28

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

December-21-11 8:24:47 AM

Page 11

Work Order ID: 77759

77759

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 21/12/2011

Required Date: 09/01/2012

Start Qty: 1.00

Required Qty: 1.00

MS21043-6

Purchased

No

230

Each

401.0000

4

4

MS21043-6

NUT

**

21/12/2011

Location

Loc Qty

Loc Code

FG

20

103693

20

ST301

381

112314

171

117887

10

118384

200

✓

D3493-1

Manufactured

No

250

Each

29.0000

2

2

D3493-1

Washer

**

77573

Location

Loc Qty

Loc Code

ST062

29

70697

2

71846

1

76237

26

MS21083C8

Purchased

No

250

Each

60.0000

2

2

MS21083C8

NUT

**

10/12/2012 PC 12/2/34

Location

Loc Qty

Loc Code

FP002

1

115884

1

ST303

59

115884

0

118077

1

118614

17

119309

2

119436

25

119638

14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 12

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Work Order ID: 77759

77759

Parent Item: D350-636-011

D350-636-011

Parent Item Name: Skidtube LH

Start Date: 21/12/2011

Required Date: 09/01/2012

Start Qty: 1.00

Required Qty: 1.00

AN8C21A

Purchased

No

250

Each

43.0000

2

2

**

120094

AN8C21A

BOLT

Location

Loc Qty

Loc Code

ST343

43

118758

13

119530

30

NAS1515H3L

Purchased

No

230

Each

107.0000

4

4

**

1120072 (x4) 11/20/10

***NAS1515H3I ***

WASHER

Location

Loc Qty

Loc Code

FG

40

102472

40

ST277

67

118686

3

119438

64

D2741

Manufactured

No

250

Each

21.0000

1

1

**

1

D2741

Blade, 350 Skidtube

Location

Loc Qty

Loc Code

ST

-8

71856

2

ST466

29

71856

19

D3532-1

Manufactured

No

250

Each

30.0000

2

2

**

71856

B 78839 11/2/10

D3532-1

Spacer

Location

Loc Qty

Loc Code

ST065

30

74880

30

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Shop Packet Print

Page 12

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D2750-041	350 SKIDTUBE ASSEMBLY, LH
	X			D2750-042	350 SKIDTUBE ASSEMBLY, RH
		X		D2750-043	350 SKIDTUBE ASSEMBLY, LH
			X	D2750-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1	1			D2750-1	SKIDTUBE WELDMENT, LH
				D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
1	1	1	1	D3535-25	WEARSHOE
1	1	1	1	D3536-25	GASKET
3	3	3	3	D3537-1	WEARPAD
8	8	8	8	D3631-1	WASHER
1	1	1	1	D3791-1	WEARPLATE
1	1	1	1	D3793-1	WEARSHOE
1	1	1	1	D3793-3	WEARSHOE
1	1	1	1	D3794-1	GASKET
1	1	1	1	D3794-3	GASKET
38	38	38	38	ALS4-1032-225	INSERT (OR ALS7-1032-225, AKS4-1032-225, AELS-1032-225)
34	34	34	34	AN3C5A	BOLT
4	4	4	4	AN3C6A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
38	38	38	38	AN960C10L	WASHER
1	1	1	1	AN960C816L	WASHER
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

GENERAL NOTES:

- 1) MATERIAL: MAKE D2750-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- 2) FINISH:
ACID ETCH, ALONDE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: D2750-041/-042/-043/-044 = 26.5 LBS
- 8) WELD PER DART QSI 004
- 9) INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED. DRILL 'F' SIZE HOLES ($\phi 0.297$) FOR WEARSHOE INSERTS
- 10) FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- 11) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS.
COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF
- 12) POWDER COATING WITH MEK DEGREASER
- 13) SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- 13) SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

STANDARD COPY
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CONTROLLED COPY
NOT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
23359 M.L.J
11/12/21

RELEASED

F	INCORPORATE DSI 9413: QTY (3) D3537-1 WAS QTY (5) (ZN C8-1); D3791-1/-3 REPLACES D3535-13/-35 (ZN C8-1); D3794-1/-3 REPLACES D3536-13/-35 (ZN B8-1); ADD D3791-1 (ZN C8-1); WEARSHOE HOLES UNDER FWD/AFT SADDLE REMOVED (8 PL). WEARSHOE HARDWARE QTY UPDATED (ZN B8-1); D3488-041/-042 HARDWARE UPDATED (ZN C1-8, 9, 10, 11); ADD NOTE 12 AND 13 (ZN A8-1); REASON: REF. NCR 08-043	PH	08.07.16
E	CHANGE TO STAINLESS STEEL WEARPLATES; ADD RUBBER GASKETS, CHANGE INSERTS; ADD D3631-1; REMOVE QTY (38) NAS1515H3L, REMOVE QTY (10) NAS1515H8L, REMOVE D2741, QTY (2) AN960C816; REMOVE QTY (2) MS21083C8	CB	07.05.17
D	ADD HOLES AND SPACERS FOR APICAL FLOATS; INCORPORATE DEO 9133/9157	PH	06.01.05
C	ADD D2750-3/D2750-4; INCORPORATE D2738 AND D2740	CP	98.11.18
B	CHANGE MS24694-S293 TO AN8-16A	CP	98.09.01
A	NEW ISSUE	DS	98.04.16
REV.	DESCRIPTION	BY	DATE
DESIGN	RA	DART AEROSPACE USA, INC.	
DRAWN	RA	PORT HADLOCK, WA	
CHECKED	AS	DRAWING NO.	REV. F
MFG. APPR.	AS	D2750	SHEET 1 OF 11
APPROVED	AS	TITLE	SCALE
DE APPR.	AS	350 SKIDTUBE ASSEMBLY	NTS
DATE	08.07.16	COPYRIGHT © 1999 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

Dart Aerospace Ltd

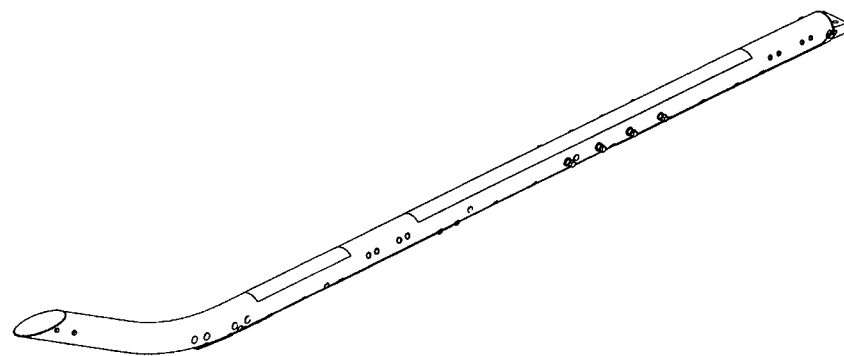
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR: Yes No** **DQA:** _____ **Date:** _____
Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

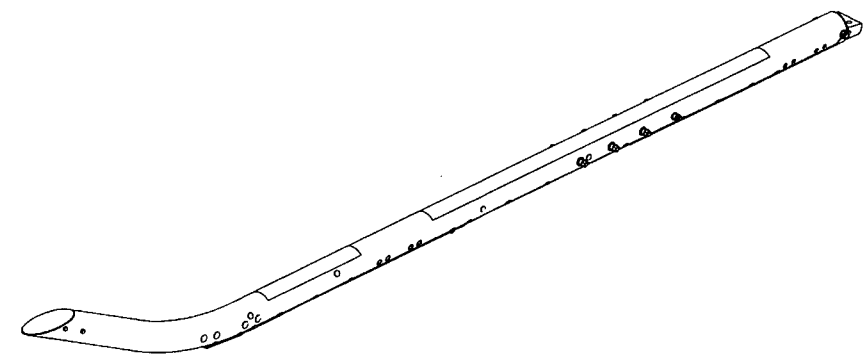
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

77759



D2750-041 350 SKIDTUBE ASSEMBLY, LH



D2750-042 350 SKIDTUBE ASSEMBLY, RH

RELEASED
18-09-22

DESIGN	PC	DART AEROSPACE USA, INC.	
DRAWN	LM	PORT HADLOCK, WA	
CHECKED	JA	DRAWING NO.	REV. F
MFG. APPR.	MY	D2750	SHEET 2 OF 11
APPROVED	MY	TITLE	SCALE
DE APPR.	JA	350 SKIDTUBE ASSEMBLY	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

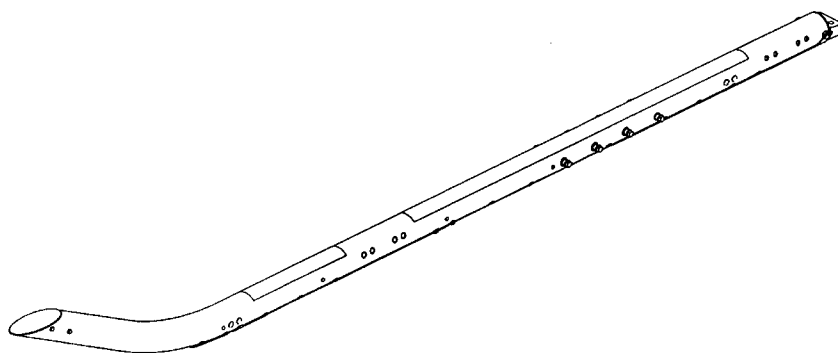
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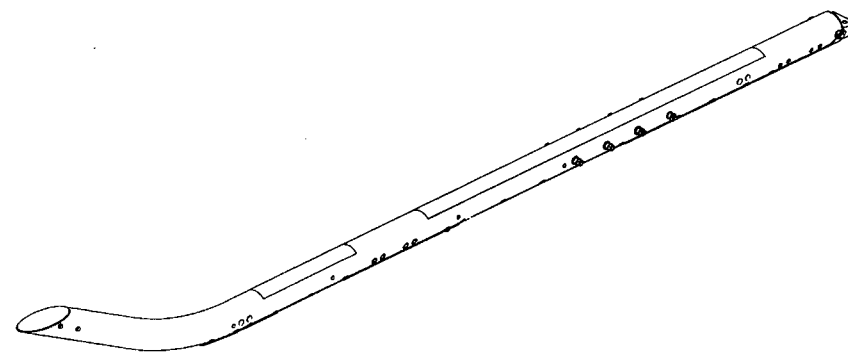
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

77759



D2750-043 350 SKIDTUBE ASSEMBLY, LH



D2750-044 350 SKIDTUBE ASSEMBLY, RH

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68-09-22/111

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

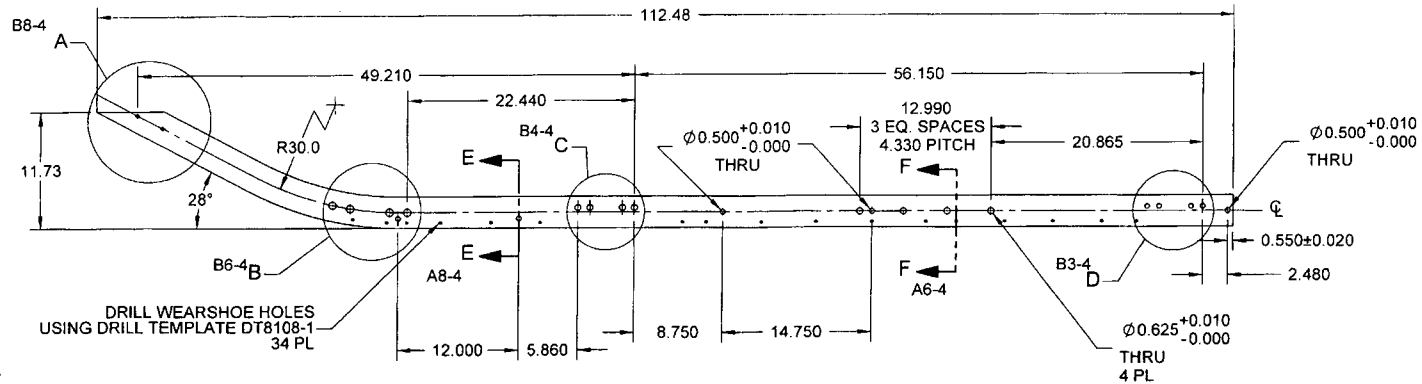
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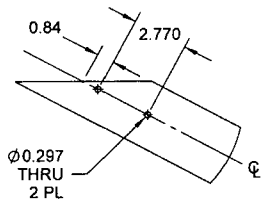
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

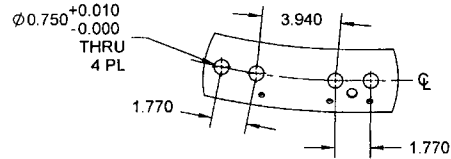
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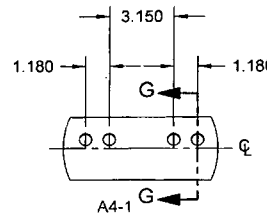
D2750-1 LH SKIDTUBE



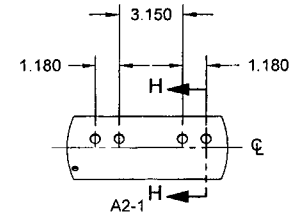
DETAIL A
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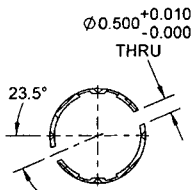
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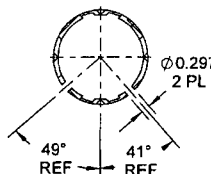
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SCALE 2X



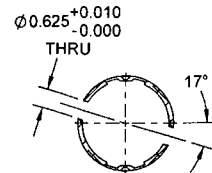
DETAIL D
SCALE 2X



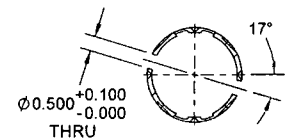
SECTION E-E
SCALE 3X, 2 PL



SECTION F-F
SCALE 3X, 17 PL



SECTION G-G
SCALE 3X, 4 PL



SECTION H-H
SCALE 3X, 4 PL

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DESIGN	PM	DART AEROSPACE USA, INC.	
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

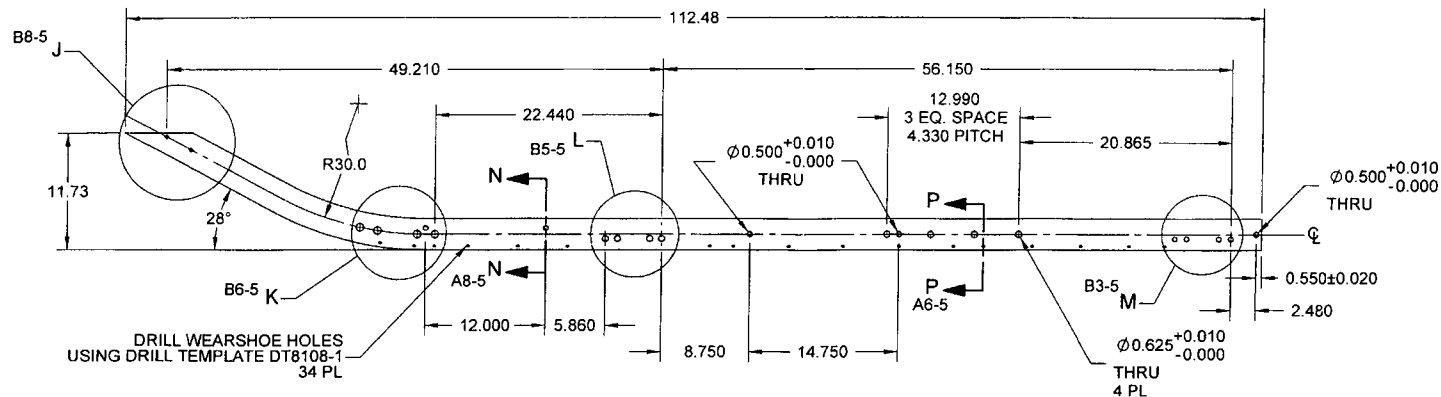
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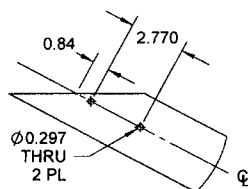
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

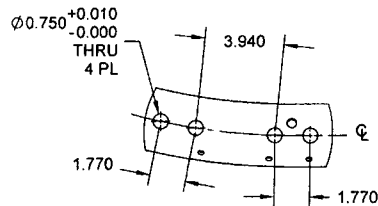
77759



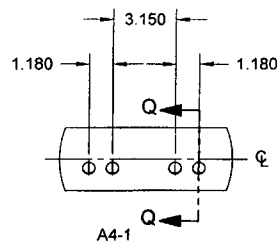
D2750-2 RH SKIDTUBE



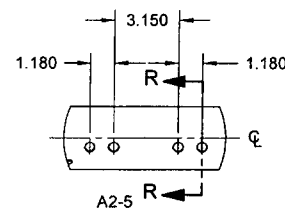
DETAIL J
SCALE 2X



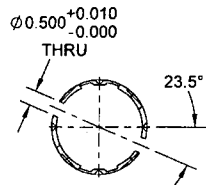
DETAIL K
SCALE 2X



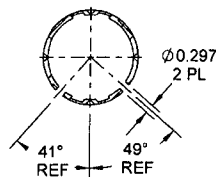
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SCALE 2X



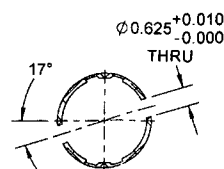
DETAIL M
SCALE 2X



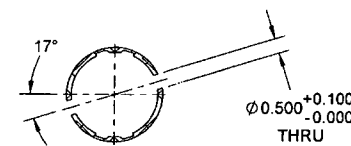
SECTION N-N
SCALE 3X, 2 PL



SECTION P-P
SCALE 3X, 17 PL



SECTION Q-Q
SCALE 3X, 4 PL



SECTION R-R
SCALE 3X, 4 PL

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DESIGN	REV. F	DART AEROSPACE USA, INC. PORT HADLOCK, WA DRAWING NO. D2750 REV. F SHEET 5 OF 11 TITLE 350 SKIDTUBE ASSEMBLY SCALE NTS
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DE APPR.		
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

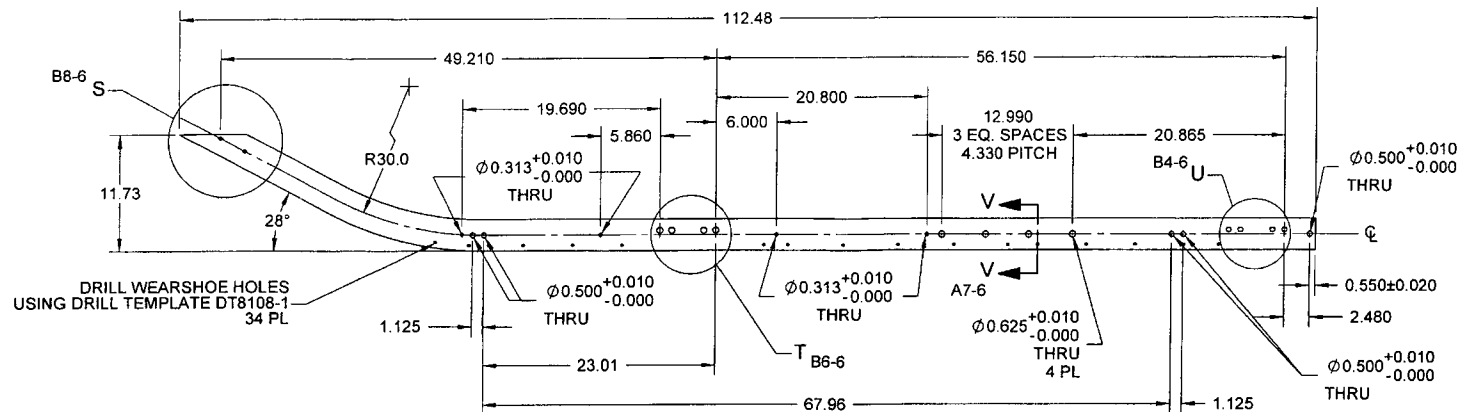
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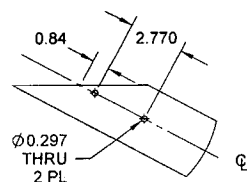
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

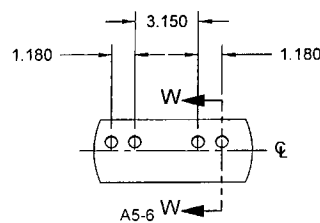
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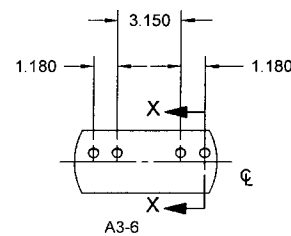
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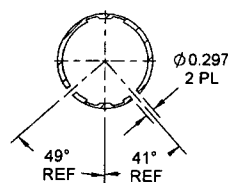
DETAIL S
SCALE 2X



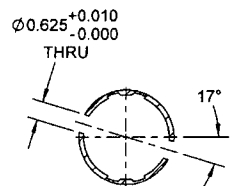
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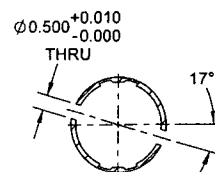
DETAIL U
SCALE 2X



SECTION V-V
SCALE 3X, 17 PL



SECTION W-W
SCALE 3X, 4 PL



SECTION X-X
SCALE 3X, 4 PL

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DESIGN		DART AEROSPACE USA, INC.	
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MFG. APPR.		D2750	SHEET 6 OF 11
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

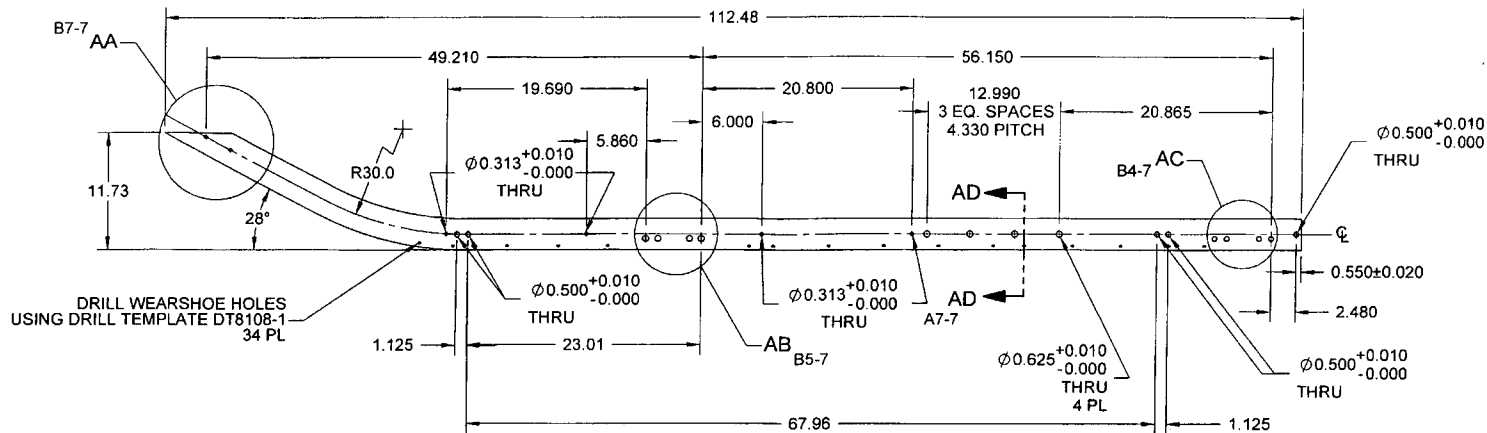
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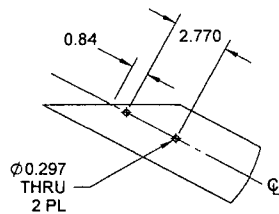
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

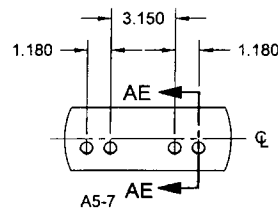
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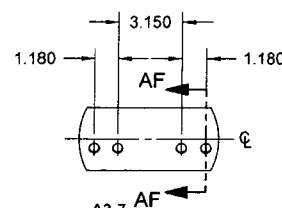
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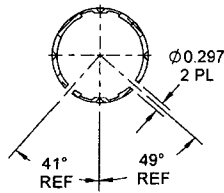
DETAIL AA
SCALE 2X
D7-7



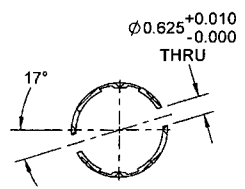
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SCALE 2X
C4-7



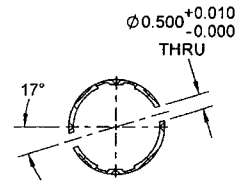
DETAIL AC
SCALE 2X
D3-7



SECTION AD-AD
SCALE 3X, 17 PL
D3-7









SECTION AE-AE
SCALE 3X, 4 PL
B6-7



SECTION AF-AF
SCALE 3X, 4 PL
B4-7

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08-04-22-110

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

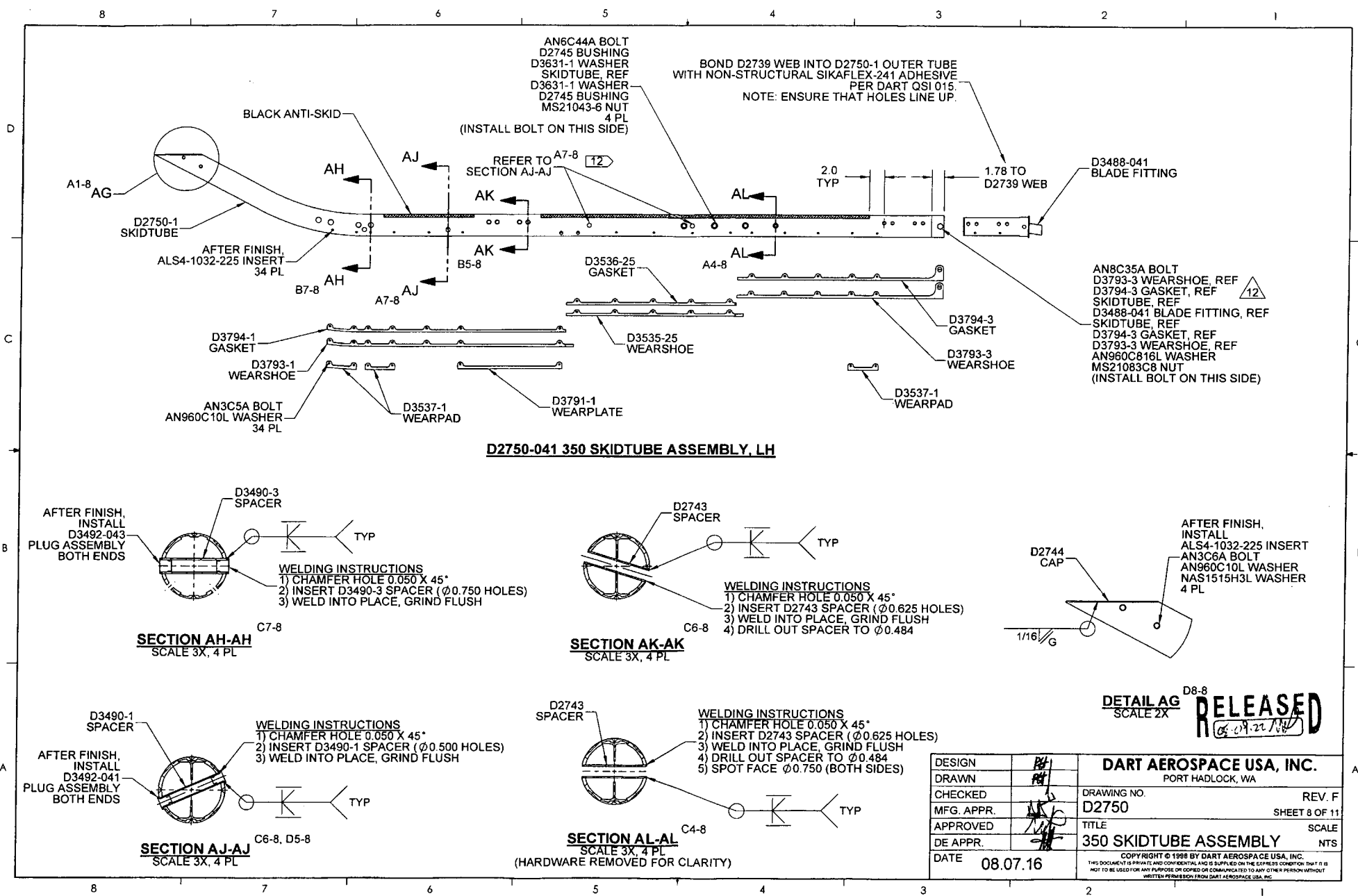
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

77759



D2750-041 350 SKIDTUBE ASSEMBLY, LH

SECTION AH-AH
SCALE 3X, 4 PL

SECTION AK-AK
SCALE 3X, 4 PL

SECTION AJ-AJ
SCALE 3X, 4 PL

SECTION AL-AL
SCALE 3X, 4 PL
(HARDWARE REMOVED FOR CLARITY)

DETAIL AG
SCALE 2X

D8-8
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DESIGN	REV. F	DART AEROSPACE USA, INC.	
DRAWN	REV. F	PORT HADLOCK, WA	
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

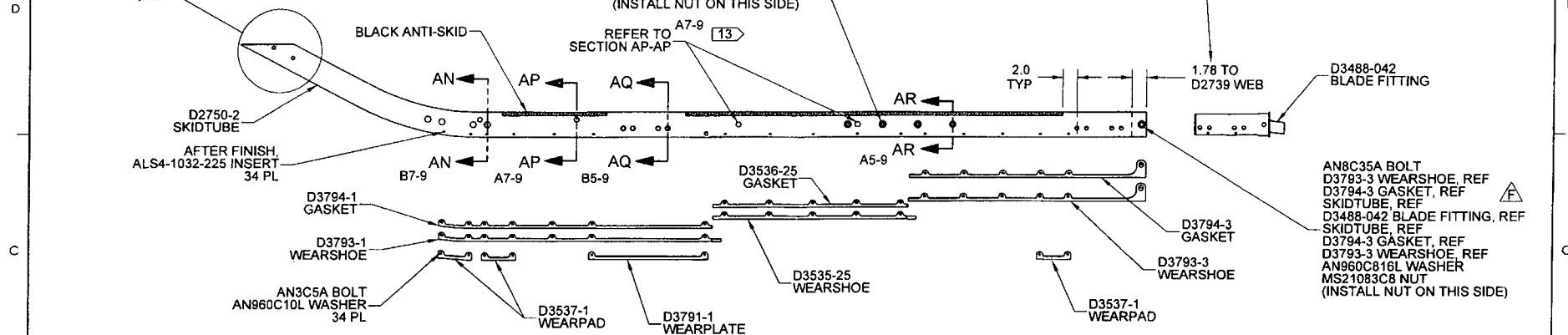
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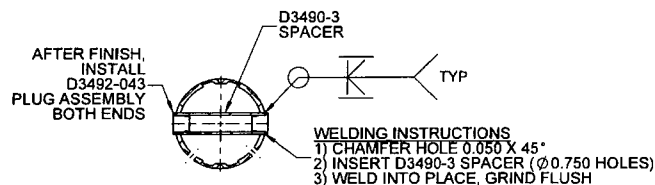
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

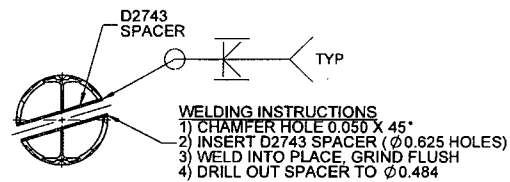
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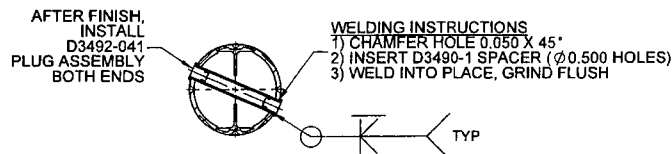
D2750-042 350 SKIDTUBE ASSEMBLY, RH



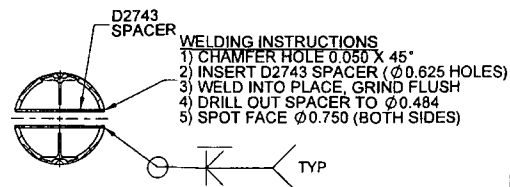
SECTION AN-AN
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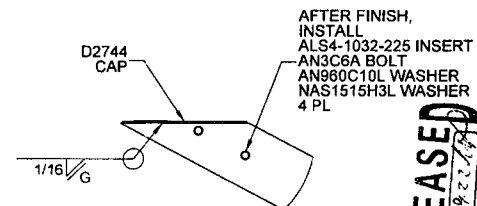
SECTION AQ-AQ
SCALE 3X. 4 PL



SECTION AP-AP
SCALE 3X, 4 PL



SECTION AR-AR
SCALE 3X, 4 PL
(PAGES REMOVED FOR CLARITY)



DETAIL AM
SCALE 2X

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CHECKED		
MFG. APPR.		
APPROVED		
DE APPR.		
DATE	08.07.16	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

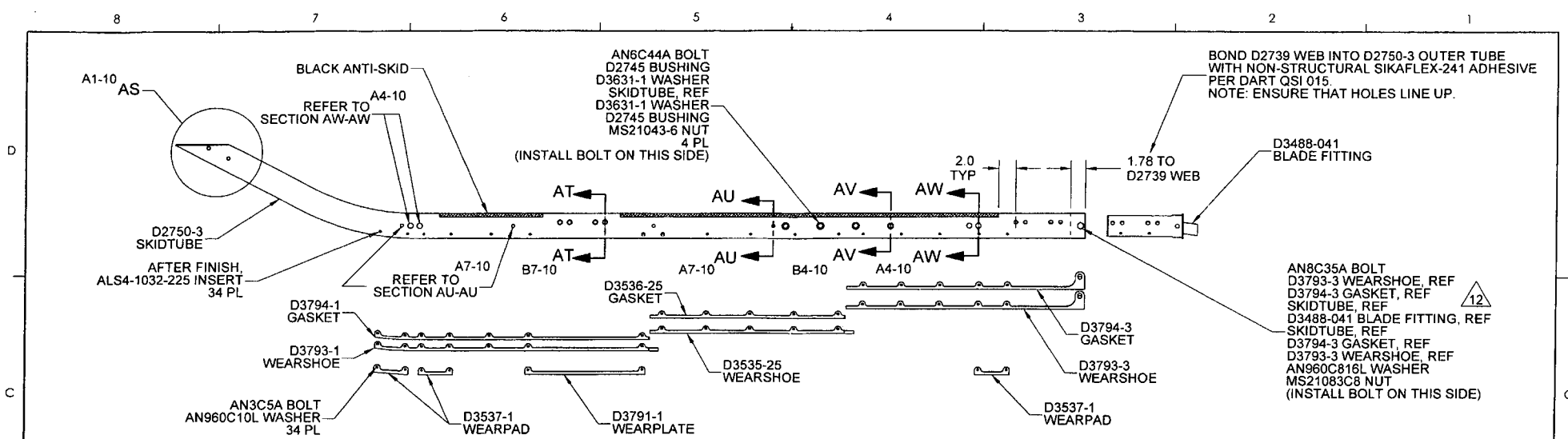
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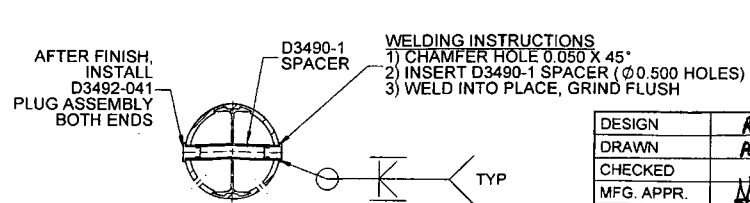
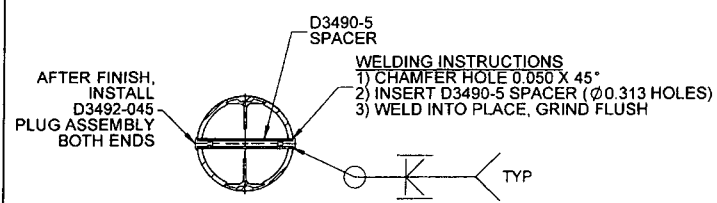
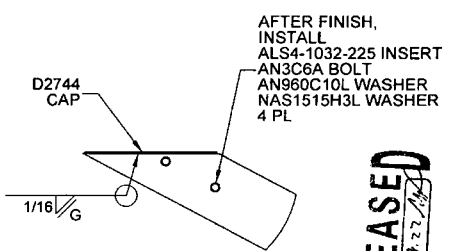
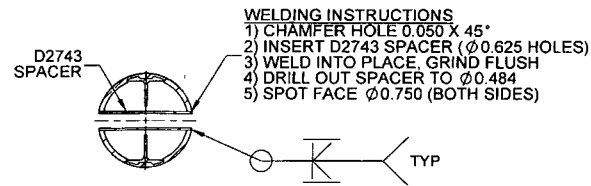
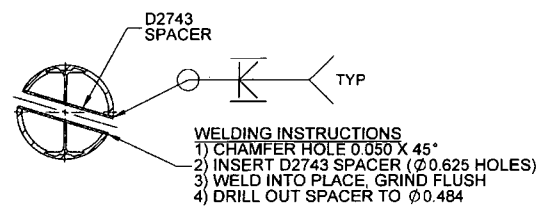
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

77759



D2750-043 350 SKIDTUBE ASSEMBLY, LH



DESIGN	AS	DART AEROSPACE USA, INC.	
DRAWN	AS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2750	SHEET 10 OF 11
APPROVED		TITLE	SCALE
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2015 JUN 27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

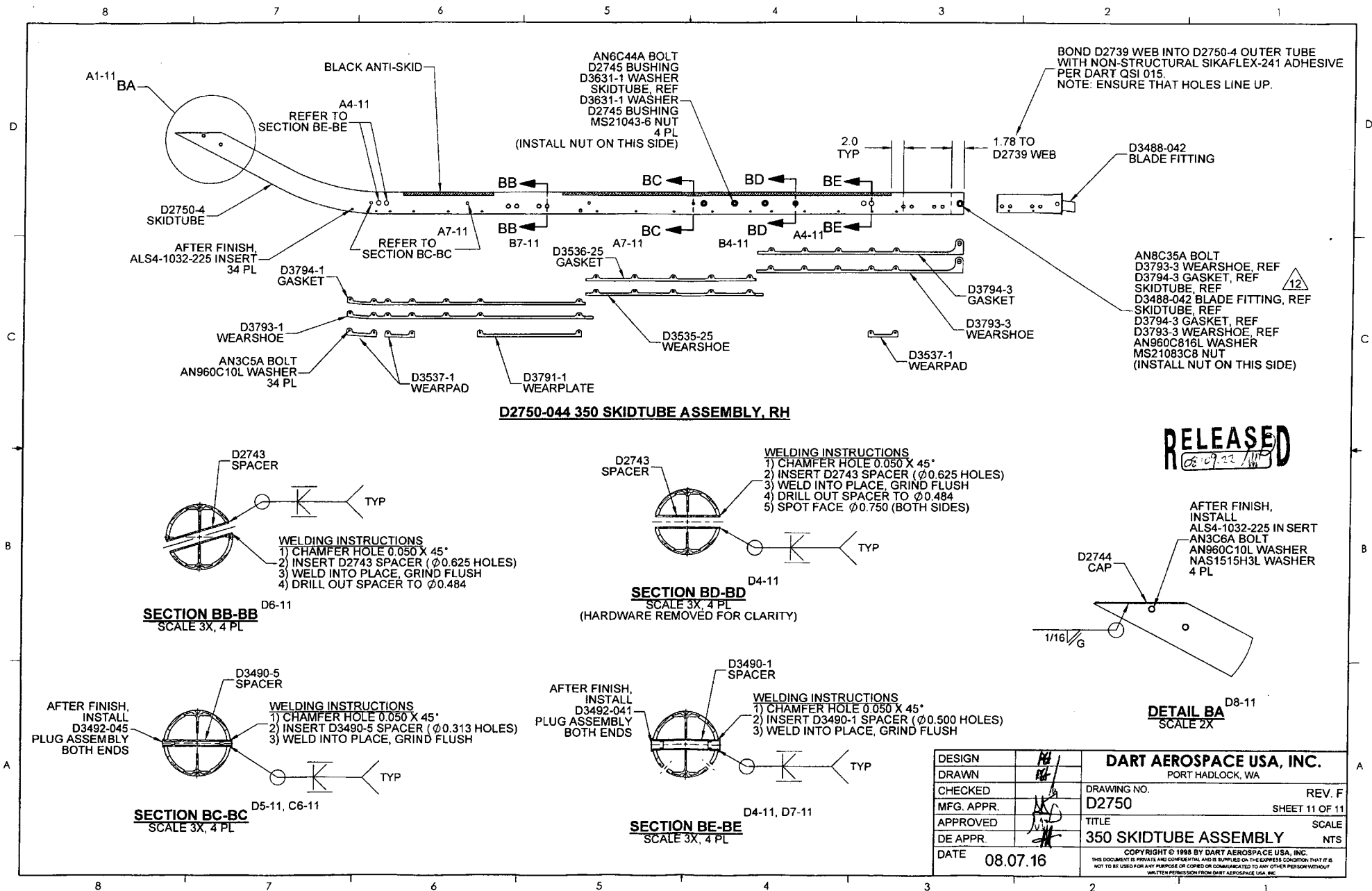
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

77759



Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR: Yes No** **DQA:** _____ **Date:** _____
Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

NO. 279

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 77362
Part number: D 350 636 012
Description: 350 skid tube
Welding Process: Tig ☒ Mig ☐
Base material: aluminum
Current: AC ☒ DC ☐

TEST REQUIREMENTS AND RESULTS

Visual: pass ☒ fail ☐
Penetration: pass ☒ fail ☐

UNACCEPTABLE

Cracks: pass ☒ fail ☐
Undercut: pass ☒ fail ☐
Pin holes: pass ☒ fail ☐
Overlap (cold lap): pass ☒ fail ☐
Porosity (surface): pass ☒ fail ☐
Coloration: pass ☒ fail ☐

Qualifier Pat Lewis Date of Test Coupon 11.12.22

Welder Barclay Elliott Date of Test Coupon 11.12.22

The above named individual is qualified in accordance with AWS D17.1.2001 to weld